31-MAR-75 16:59:51,1155 Date: 31 MAR 1975 1659-PST From: CARHART

Subject: WEATERVANES

LECERBERG To: cc: CARHART

I HAVE ACTUALLY BUILT MY 26-NODE STRUCTURE AND THE YES, I HAVE ACTUALLY BUILT MY 20-NODE STRUCTURE AND THE GROUP IS CORRECT. THE WEATERVANES CAN BE FIT TOGETHER BECAUSE THE TRIANGULAR PERIMETER HAS A PATTERN LIKE [C.X.C.X.C.X.] - THAT IS, EACH EDGE OF THE TRIANGLE READS C-X-C. THUS THERE IS NO CONFLICT IN ASSEMBLING THEM. THE "HANDEDNESS" OF THE FACES DERIVES NOT FROM THE PERIMETER OF THE FACES BUT FROM THE INTERNAL POPTION. BUT FROM THE INTERNAL PORTION. IF THE TETRAHEDRON
IS DRAWN IN THE PLANAR REPRESENTATION, THEN
YOU CAN ORIENT THE FACES PROPERLY BY GIVING EACH
SMALL INNER TRIANGLE A CLOCKWISE ORIENTATION,
AND GIVING THE LARGE OUTER TRIANGLE A COUNTERCLOCKWISE AND GIVING THE LARGE OUTER TRIANGLE A COUNTERCLOCKY ORIENTATION. I SEE NOW WHAT THE SOURCE OF THE CONFUSION MIGHT BE — I SAID THAT THE PINUHEELS "FIGHT EACH OTHERS CURRENT" AT EVERY EDGE, BUT I DIDN'T MEAN THAT THE HANDEDNESS WAS DIFFERENT. IF THE TETRAHEDRON IS A SOLID OBJECT, EACH FACE IS PAINTED WITH THE SAME HANDEDNESS. OF COURSE, THIS IS EXACTLY THE IDEA YOU PRESENTED, EXCEPT THAT THE CHIRALITY OF EACH NODE OF THE TETRAHEDRON DERIVES FROM THE OPPOSING FACE DERIVES FROM THE OPPOSING FACE.

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